

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,212	. 02/09/2004	Yoshiya Tomatsu	118596	6750
25944 75	90 09/13/2005		EXAMINER	
OLIFF & BERRIDGE, PLC			GLEITZ, RYAN M	
P.O. BOX 1992	28	ď		
ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/773,212	TOMATSU, YOSHIYA	)			
Office Action Summary	Examiner	Art Unit				
	Ryan Gleitz	2852				
The MAILING DATE of this communication app	ears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tir ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. (D. (35 U.S.C. § 133).				
Status						
<ul> <li>1) Responsive to communication(s) filed on</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowant</li> </ul>	action is non-final.	osecution as to the merits is				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		·				
4) ☐ Claim(s) 1-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6,10-13,17-22 and 26-29 is/are reject 7) ☐ Claim(s) 7-9,14-16,23-25 and 30-32 is/are object 8) ☐ Claim(s) are subject to restriction and/or	cted. ected to election requirement.					
9) ☐ The specification is objected to by the Examine  10) ☑ The drawing(s) filed on 08 July 2004 is/are: a)  Applicant may not request that any objection to the off  Replacement drawing sheet(s) including the correction  11) ☐ The oath or declaration is objected to by the Examine	☑ accepted or b) ☐ objected to drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicative documents have been received in Received in Receiver (PCT Rule 17.2(a)).	tion No ed in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/9/04.	4) Interview Summar Paper No(s)/Mail I 5) Notice of Informal 6) Other:					

Application/Control Number: 10/773,212

Art Unit: 2852

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 11-13, 19, and 27-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 19, which depend on claims 1 and 17, further recite "a first conveyance roller". However, the first conveyance roller is the conveyance member, which has already been recited in claims 1 and 17.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 17, 18, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakurai (US 4,580,033).

Sakurai discloses a fixing member (1) disposed to be in contact with a fixation medium (P); a pressuring member (2) disposed to face the fixing member (1) and configured to press the fixation medium (P) against the fixing member (P).

Paper discharge rollers (20, 21) are a conveying unit configured to convey the fixation medium (P) that has passed through between the fixing member (1) and the pressuring member

Art Unit: 2852

(2). Roller (21) is a conveyance member configured to convey the fixation medium, and configured to be in contact with the fixation medium on a surface that is opposite to a surface where the fixing member contacts with at a position that is downstream of the fixing member with respect to a conveyance direction of the fixation medium and is upstream of a conveyance position where the conveyance unit conveys the fixation medium. Note that the fixing member must contact conveyance member (21) before it enters conveyance position, and that point will be upstream of the conveyance position.

A guide member, including pawl (5b) and the portion to the left of the pawl having no reference number, is disposed to face the conveyance member (21) and configured to guide the fixation medium (P) to the conveyance position.

Regarding claim 6, figure 1 illustrates the guide member is disposed along a direction of a line that intersects with a tangential line of the fixing member (1) at a contact portion where the fixing member (1) contacts the pressuring member (2).

Regarding claims 17, 18, and 22, fixing device is located in an image forming apparatus having an image forming section.

Claims 1, 2, 5, 6, 10, 17, 18, 21, 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Pawlik et al. (US 6,002,913).

Pawlik et al. disclose a fixing member (12) disposed to be in contact with a fixation medium (S); a pressuring member (14) disposed to face the fixing member and configured to press the fixation medium (S) against the fixing member (12); a conveying unit (30) configured to convey the fixation medium (S) that has passed through between the fixing member (12) and

Application/Control Number: 10/773,212

Art Unit: 2852

the pressuring member (14); a conveyance member (34) configured to convey the fixation medium (S), and configured to be in contact with the fixation medium on a surface that is opposite to a surface where the fixing member contacts with at a position that is downstream of the fixing member (12) with respect to a conveyance direction of the fixation medium and is upstream of a conveyance position where the conveyance unit conveys the fixation medium.

Baffle (20) is a guide member disposed to face the conveyance member (30) and configured to guide the fixation medium to the conveyance position.

Regarding claim 5, figure 1 shows that a part of the conveyance member (36) is disposed on a line connecting the conveyance position and a contact portion where the fixing member (12) contacts the pressuring member (14).

Regarding claim 6, the guide member (20) is disposed along a direction of a line that intersects with a tangential line of the fixing member at a contact portion where the fixing member (12) contacts the pressuring member (14).

Regarding claim 10, a contact portion of the conveyance member where the conveyance member contacts the fixation medium is deformable and made or porous silicone (col. 5, lines 8-9), which reads on made of elastic material, and a contact portion of the guide member where the guide member contacts the fixation medium is made of metal material, as shown by the cross hatching in figure 1.

Regarding claims 17, 18, 21, 22 and 26, fixing device is located in an image forming apparatus having an image forming section.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 11, 19, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakurai (US 4,580,033) in view of Nakagawa et al. (US 5,258,815).

Sakurai discloses the fixing device above, but does not disclose at least three conveyance rollers.

However, Nakagawa discloses a similar fixing device including a first conveyance roller (16b) and a plurality of second conveyance rollers (16a, 17) disposed along the conveyance direction of the fixation medium, and each disposed to face the first conveyance roller (16a) to support and convey the fixation medium.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fixing device of Sakurai with the plurality of secondary conveyance rollers taught by Nakagawa et al. to correct the curl of the paper. See abstract.

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakurai (US 4,580,033) in view of Sawai (JP 05-273881)

Sakurai discloses the fixing device above, but does not disclose a plurality of pressuring members.

However, Sawai discloses a similar fixing device including first (10) and second (11) pressure rollers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fixing device of Sakurai with the plurality of pressure rollers taught by Sawai to obtain a wide nipping width without making the pressure force high and to avoid paper jamming. See abstract, lines 1-4.

# Allowable Subject Matter

Claims 7-9, 14-16, 23-25, and 30-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 12, 13, 28, and 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### Other Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoda et al. (US 5,893,019) disclose a fixing device having a conveyance unit and a plurality of pressuring members.

## **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Gleitz whose telephone number is (571) 272-2134. The examiner can normally be reached on Monday-Friday between 9:00AM and 6:00PM.

Application/Control Number: 10/773,212 Page 7

Art Unit: 2852

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 $\mathcal{L}_{rg}$ 

Arthur T. Grimley
Supervisory Patent Examiner
Technology Center 2800